Application Number: 09/696,232
Attorney Docket Number: 07553.0017

REMARKS

By this Amendment, Applicants propose to cancel claims 7-11, 15, and 16 without prejudice or disclaimer of the subject matter thereof and propose to amend claims 1 and 13. Accordingly, because claims 6 and 12 have been canceled previously, claims 1-5, 13, and 14 will be pending and claim 1 will be the only independent claim in this application if the Examiner enters this Amendment After Final.

In the Final Office Action, the Examiner rejected claims 1-5, 7-11, and 13-16 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. *See* Page 2.

Because Applicants propose to cancel claims 7-11, 15, and 16, the rejection under §112, first paragraph, becomes moot regarding these claims if the Examiner enters this Amendment After Final.

Regarding claims 1-5, 13, and 14, Applicants propose to address the rejection under §112, first paragraph by amending claims 1 and 13. Specifically, Applicants propose to amend claim 1 to recite that "said processing gas contains N_2 and at least one of C_4F_8 and CF_4" and propose to amend claim 13 to recite that "said processing gas contains at least CF_4 and N_2." Applicants respectfully submit that these proposed amendments to claims 1 and 13 address the Examiner's rejection under §112, first paragraph.

Also in the Final Office Action, the Examiner rejected claims 1-5, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over Halman et al. (U.S. Patent No. 5,658,425) in view of Bollinger et al. (U.S. Patent No. 6,140,222).

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Applicants respectfully traverse the rejection under 35 U.S.C. §103(a) because the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), each of three requirements must be met. First, the references, taken alone or combined, must teach or suggest each and every element recited in the claims. *See* M.P.E.P. § 2143.03. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must "be found in the prior art, and not be based on applicant's disclosure." M.P.E.P. § 2143.

For example, there is no motivation to combine Halman et al. and Bollinger et al. in a manner that could result in the invention recited in independent claim 1. The Examiner admitted (see Final Office Action, page 4) that Halman et al. fails to disclos or suggest "an upper organic film containing Si formed on an SiO_2 film," as recited in independent claim 1. The Examiner, however, alleged that it would have been obvious "to apply polysiloxane [of Bollinger] over Halman's silicon dioxide layer." Final Office Action, page 4.

The Examiner's alleged modification of Halman et al. based on Bollinger et al. is an impermissible hindsight reconstruction. Halman et al. discloses "etching of silicon oxide such as silicon dioxide" using an etching gas including "a fluoride-containing gas and a passivating nitrogen gas." Abstract. Halman et al. further disclos s that "[t]he fluorid -containing gas can b CF_4, CHF_3, C_2F_6, CH_2F_2, SF_6, other Freons and mixtures

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thereof." *Id.* The Examiner's alleged modification thus involves applying the polysiloxane of Bollinger et al. over the silicon oxide of Halman et al., and then utilizing the silicon oxide etching gas disclosed in Halman et al. to etch polysiloxane. Neither Halman et al. nor Bollinger et al., however, discloses or suggests using an etching gas, including a fluoride-containing gas and a passivating nitrogen gas, for the purpose of etching polysiloxane. Accordingly, the Examiner's obviousness rejection is based on an impermissible hindsight reconstruction because there is no motivation to combine Halman et al. and Bollinger et al. in a manner alleged by the Examiner.

For at least this reason, the Examiner has failed to establish a *prima facie* cas of obviousness regarding the subject matter of independent claim 1.

Thus, if the Examiner enters this Amendment After Final, independent claim 1 will be in condition for allowance. Claims 2-5, 13, and 14 will also be in condition for allowance at least by virtue of their dependency from allowable independent claim 1.

Applicants respectfully request that this Amendment After Final be entered by the Examiner, placing claims 1-5, 13, and 14 in condition for allowance. Applicants submit that the proposed amendments of claims 1 and 13 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment After Final should allow for immediate action by the Examiner.

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Finally, Applicants submit that the entry of this Amendment After Final would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, Applicants request the entry of this Amendment After Final, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: September 4, 2003

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DWH/CHK

PLEASE STAMP TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:

In Re Application of: Mitsuru ISHIKAWA et al.
Application No.: 09/696,232 Group Art Unit: 1763
Filed: October 26, 2000 Examiner: A. Olsen
For: ETCHING METHOD

Mail Stop AF

1. Amendment After Final (7 pages)

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Docket No.: 07553.0017
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(Due Date: September 5, 2003)

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